



**A unique event in an exceptional environment**

**More than 1.600 delegates  
from more than 60 nations  
Exhibition area 7.000 m<sup>2</sup>**

**Announcement  
and Call for Papers**



Should you wish to be added to our photovoltaic mailing list fill in the form and send it to:

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#### CHAIRMEN'S MESSAGE

It is our great privilege and honour to welcome you to the 19<sup>th</sup> European PV Solar Energy Conference and Exhibition in the ever-young city of Paris.

Historically the European PV Conference was first a forum for scientists and researchers with only limited industry involvement. Thanks to the outstanding achievements of all research institutes worldwide, the PV industry could build their product development on this basis. Much more research and development continues to be needed and we are sure we will again see highly innovative, world-class ideas and results presented in our plenary, oral and poster sessions. This will propel our industry by opening opportunities for us to serve new customer needs with novel products and to better meet existing needs with improved products.

As representatives of the European PV solar electricity research, industry, and the PV applications community, we would like to use this forum to highlight the challenges ahead of us. We are entering an era of substantial market development and commercial transition of our industry in which Research, Technology and Demonstration achievements will play an important role.

We now have the future of our PV industry in our hands: By creating new markets to accelerate the worldwide cumulative PV megawatts installed, we are able to drive further down in the price experience curve. In this way, we will be more rapidly competitive in all market segments, including grid-connected systems competing with peak power supply in a deregulated worldwide utility market. For that, commitment is needed to achieve the stated goals of Japan, the USA and Europe of achieving a cumulative installed PV capacity of respectively 4.8 GW, 2.1 GW and 3.0 GW in 2010. If a cost effective feed in law were installed throughout Europe by appropriate directives, we could even surpass our goals. Things can - and will - happen if we want them to!

In addition to these grid-connected market activities, we need to boost financial engineering for export programmes for rural electrification to deliver "Power for the World". More than 2 billion people are lacking electricity to power communications, education, health and similar prerequisites for sustainable development, and PV gives new opportunities to keep people in rural areas and slow migration into the continuously expanding outskirts of Mega Cities.

It is our firm belief that this international event should be remembered in the future as a milestone for having illuminated the right track for faster worldwide growth of our young solar electricity sector so that it can expand into a 100 billion € market in the coming decades. Our ultimate objective: an ever-increasing role for clean and reliable solar electricity in the global energy portfolio.

Winfried Hoffmann  
RWE SCHOTT Solar  
Conference Chairman

Jean-Louis Bal  
ADEME  
Conference Vice-Chairman



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## 19th European Photovoltaic Solar Energy Conference and Exhibition

**Palais des Congrès  
Paris, France  
7-11 June 2004**

**Supported by:**

**The European Commission  
UNEP-United Nations Environment Programme  
ADEME-Agency for Environment and Energy  
Management  
EDF-Electricité de France  
CEA-New Energy Technologies  
TOTAL**

**Syndicat des Energies Renouvelables  
EPIA-European Photovoltaic Industry Association**

**Realized by: WIP-Munich and ETA-Florence**



Conference chaired by:  
**Dr. Winfried Hoffmann, RWE SCHOTT Solar**  
**Jean-Louis Bal, ADEME (Vice Chairman)**

## PROGRAMME

The five-day programme for the Conference will comprise:

- Plenary lectures focusing on the state-of-the-art and targets of PV
- Oral and poster presentations of specific research, development and demonstration projects, PV applications and PV market.
- Exhibition of PV products and services
- Workshops, fora, contact events on specific PV issues
- A day parallel to the programme on PV in architecture and urban planning
- Scientific tours and a social programme

## CONFERENCE SUBJECTS

**Papers are invited on the following topics:**

### 1 Fundamentals, Novel Devices and New Materials

Theoretical studies, innovative concepts, organic materials, thermo-photovoltaics

### 2 Crystalline Silicon Solar Cells and Materials Technology

including mono- and multicrystalline silicon cells and materials, thin-film crystalline silicon cells, processing technology of feed-stock, wafers, sheets, ribbons and cells

### 3 Amorphous and Microcrystalline Silicon

film preparation, material characterisation and theoretical studies of amorphous and microcrystalline silicon cells, manufacturing and industrialisation

### 4 CIS, CdTe and other (II-VI) Ternary Thin Film Cells

film preparation, material characterisation, theoretical studies, manufacturing and industrialisation

### 5 PV Modules and Components of PV Systems

including encapsulation, production technology, standards and testing of cells, modules, arrays and systems; concentrator systems, power conditioning, grid interfacing, storage systems; development of standard products, professional stand-alone systems and their applications

### 6 PV Systems in grid-connected applications

Integration in buildings. Technical and aesthetical issues, landscape integration of larger systems, utility issues. Market deployment, national and regional support strategies, policies, finance and legislation. Examples of successful projects and programs

### 7 Global Aspects of PV Solar Electricity

PV power for the world. PV as part of a global strategy to integrate the renewables in sustainability policies. Stand-alone systems for electrification, mini grids for villages and towns, islands, hybrid systems. Market deployment, national and regional support strategies, policies, finance and legislation. Strategies in developing and emerging countries. North-South co-operation

### 8 Space Cells and Systems

including III-V cells



Coordination of the Scientific Programme:  
**Dr. Heinz Ossenbrink**  
**European Commission, Joint Research Centre**

## REVIEW PROCEDURE

Papers will be presented in plenary, oral and poster sessions and all presented papers will be published in the Proceedings. Authors wishing to submit a contribution should read the following instructions carefully and send an abstract to the address given below. The abstract, single spaced and in English, should include:

- Applicable subject number (1 to 8)
- Full title
- Full name and address of one author for all correspondence
- For each author and co-authors, full name, affiliation, address, phone/fax/e-mail
- Purpose of the work
- Approach
- Scientific innovation and relevance
- Results
- Conclusions

The abstract should not exceed one page (size A4, 210 x 300mm). In addition, authors may add up to 3 explanatory pages, which will facilitate the reviewers assessment.

### DEADLINE FOR RECEIPT OF ABSTRACT: 31 October 2003

Only contributions complying with the above specifications will be considered. Please send preferably by email one copy of this complete information (abstract plus optionally up to 3 explanatory pages) as a \*.doc or \*.pdf file to:

**e-mail: [pv.conference@wip-munich.de](mailto:pv.conference@wip-munich.de)**

For abstract submission by mail, please send also 1 hard copy and a 3,5 IBM formatted diskette or a CD-Rom with a \*.doc file to:

**WIP**

**Ms. Christine Flingelli**

**Sylvensteinstr. 2**

**D-81369 Munich, Germany**

If you have any questions concerning abstracts please contact WIP

**Telephone +49-(0)89-720-12735**

**Telefax +49-(0)89-720-12791**

**e-mail: [pv.conference@wip-munich.de](mailto:pv.conference@wip-munich.de)**

For enquiries concerning the abstracts review and topics, address to

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**Dr. Ewan Dunlop**

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**e-mail: [pv.conference@jrc.it](mailto:pv.conference@jrc.it)**

The abstracts will not be public accessible until the Conference. All authors will be notified by January 2004 of the decision of the Programme Committee. Authors of accepted abstracts will receive at the same time special instructions for the preparation of the final papers for the Proceedings.

Please type or print clearly and send to: **WIP, Sylvensteinstr. 2, D-81369 Munich, Germany, Tel. +49-89-720 12 735, Fax. +49-89-720 12 791**

Family Name: Mr./Ms./Dr./Prof. \_\_\_\_\_

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Telephone: \_\_\_\_\_ Telefax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Country: \_\_\_\_\_

Main interest/specialty with reference to the programme: \_\_\_\_\_

☐ I am interested to offer a paper

☐ Please add my name to the PV mailing list and send me further details

☐ My organisation is interested in exhibiting. Please send details. We would need about \_\_\_\_\_ m<sup>2</sup> space.

A prospectus will be sent to interested exhibitors. Industry, manufacturer, equipment suppliers and installers, service providers and organisations wishing to consider participation in the exhibition are invited to express their interest.

**19<sup>th</sup> European Photovoltaic Solar Energy Conference and Exhibition, 7-11 June 2004, Paris, France**